

Attachment 2
Academic Affairs
Discussion Agenda Information

College of Arts and Sciences (11-12-15)

NON-EXPEDITED UNDERGRADUATE MINOR PROPOSAL
Department of Modern Languages

ADD:

Spanish Translation Minor

Minor Program Requirements (18 Credit Hours)

Professional writing in English elective (3 credit hours)

Students complete one of the following courses:

- ENGL 302 – Technical Writing credits: (3)
- ENGL 400 – Advanced Expository Writing for Prospective Teachers Credits: (3)
- ENGL 415 – Written Communication for Engineers Credits: (3)
- ENGL 417 – Written Communication for the Workplace Credits: (3)
- ENGL 510 – Introduction to Professional Writing Credits: (3)
- ENGL 516 – Written Communication for the Sciences Credits: (3)
- MC 200 – News and Feature Writing Credits: (3)
- MC 221 – Advertising Strategy and Writing Credits: (3)
- MC 426 – Magazine and Feature Writing Credits: (3)

Approaches to language elective (3 credit hours)

Students must complete one of the following courses:

- COMM 480 – Intercultural Communication Credits: (3)
- ANTH 514 – Language and Culture Credits: (3)
- ANTH 792 – Linguistic Methods Credits: (3)
- SPAN 600 – Introduction to Linguistics Credits: (3)
- SPAN 670 – Advanced Spanish Grammar Credits: (3)
- SPAN 776 – History of the Spanish Language Credits: (3)
- ENGL 430 – The Structure of English Credits: (3)
- ENGL 435 – Linguistics for Teachers of English Credits: (3)
- ENGL 490 - Development of the English Language Credits: (3)

Professional Spanish (3 credit hours)

Students must complete one of the following courses:

- SPAN 530 – Professional Spanish: Business Credits: (3)
- SPAN 531 – Professional Spanish: Health and Human Services Credits: (3)

Core Courses (9 credit hours)

Students complete all of the following courses:

- SPAN 575 – Introduction to Spanish Translation Credits: (3)

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| <ul style="list-style-type: none"> • SPAN 771 - Advanced Spanish Translation Credits: (3) • SPAN 774 – Topics in Spanish Translation or Interpreting Credits: (3) |
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RATIONALE:

In their professional and civic lives, bilingual people are often called upon to translate written texts or serve as interpreters in oral communication. Those without formal training in translation or interpreting can do more harm than good when they attempt to convey meaning across languages and cultures. The state of Kansas lacks resources for students looking to develop basic translation skills or prepare for advanced study leading to career in the translation/interpreting field (in addition to the Wichita State program listed in Appendix 2, Johnson County Community College offers programs in medical and legal interpreting). As the number of Kansas residents with limited English proficiency increases, the need for qualified translators and interpreters is rising. Professionally trained translators and interpreters are in high demand nationwide; according to the National Bureau of Labor Statistics, employment for translators and interpreters is projected to increase 46 percent from 2012 to 2022, much faster than the average projected growth for all occupations.

By adding a Spanish translation minor, K-State would become the first university in Kansas to provide a basic foundation in translation studies. Students completing the minor would be well informed about circumstances under which they could ethically provide translation or interpreting services, and about what additional training they would need in order to become professional translators or interpreters. Addressing this urgent need in the state is consistent with the land-grant mission of the university, and expanding language program offerings supports the internationalization component of the K-State 2025 plan.

The Modern Languages Department already has the resources to offer this minor. Spanish faculty with translation expertise include three associate professors, one assistant professor, and an instructor; one Spanish faculty member is currently certified by the American Translators Association.

Student interest in the two existing Spanish translation courses have been high, with consistently strong enrollments (500-level courses are currently capped at 15, and 700-level courses are capped at 10):

	<u>Fall 15</u>	<u>Fall 14</u>	<u>Fall 13</u>	<u>Fall 12</u>	<u>Fall 10</u>	
SPAN 575	18		18	16	16	14
	<u>Spring 15</u>		<u>Spring 13</u>	<u>Fall 11</u>	<u>Spring 10</u>	
SPAN 771	8		14	15	15	

Proposed Student Learning Objectives for the Spanish Translation Minor:

- Students will demonstrate culturally and linguistically effective basic Spanish-English translation skills in a variety of subject areas
- Students will demonstrate effective professional writing skills in English and Spanish
- Students will demonstrate knowledge of the translation profession, codes of ethics, and resources available for future professional development.

IMPACT: English, Journalism and Mass Communications, Communication Studies, Sociology, Anthropology, and Social Work have all given their approval for the courses to be added to the minor.

EFFECTIVE DATE: Fall 2016

College of Engineering (11-12-15)

College of Engineering

Selective Admissions Proposal

ADD

[Note: At the current time, the College of Engineering does not have admission guidelines that are different from the university. For general admissions to K-State, for Fall 2015 the KBOR requires an ACT composite of at least 21; OR SAT of at least 980; or graduate in the top 1/3 of the HS class; AND have a 2.00 HS GPA on the Qualified Admission or Kansas Scholars curriculum.]

Require new students to (1) have an ACT (or SAT) score; and (2) require a composite ACT of 21 or higher, plus a HS gpa of 3.00 or higher to enter into the College of Engineering General Engineering program or CNSM. Students who have a composite ACT of 24 or higher plus a HS gpa of 3.00 or higher may be admitted to Computer Science (CS) or any of the other engineering degree programs (ARE, BSE, CHE, CE, CMPEN, EE, IE, ME). Students not admitted to the College of Engineering can enter the university Open Option program or another available college/degree program. They can still enter the College of Engineering as an internal transfer student. Internal transfer students will be required to have passed MATH 220 (or equivalent) (MATH 205 for CNSM) with a "C" or better and have a K-State cumulative gpa of at least 2.50 on 12 or more KSU hours. International students admitted to K-State as a new student without an ACT score will have the same admission requirements as an internal transfer student. External transfer students will be required to have passed MATH 220 (or equivalent) (MATH 205 for CNSM) with a "C" or better and have a transfer gpa of at least 2.75 on 12 or more transfer hours.

RATIONALE

The College of Engineering has been receiving students who are not academically prepared to enter the first year of the curriculum which includes MATH 220 and CHEM 210. Many of these students leave the college, fail one or more of their first semester courses, go on academic warning and/or create financial debt.

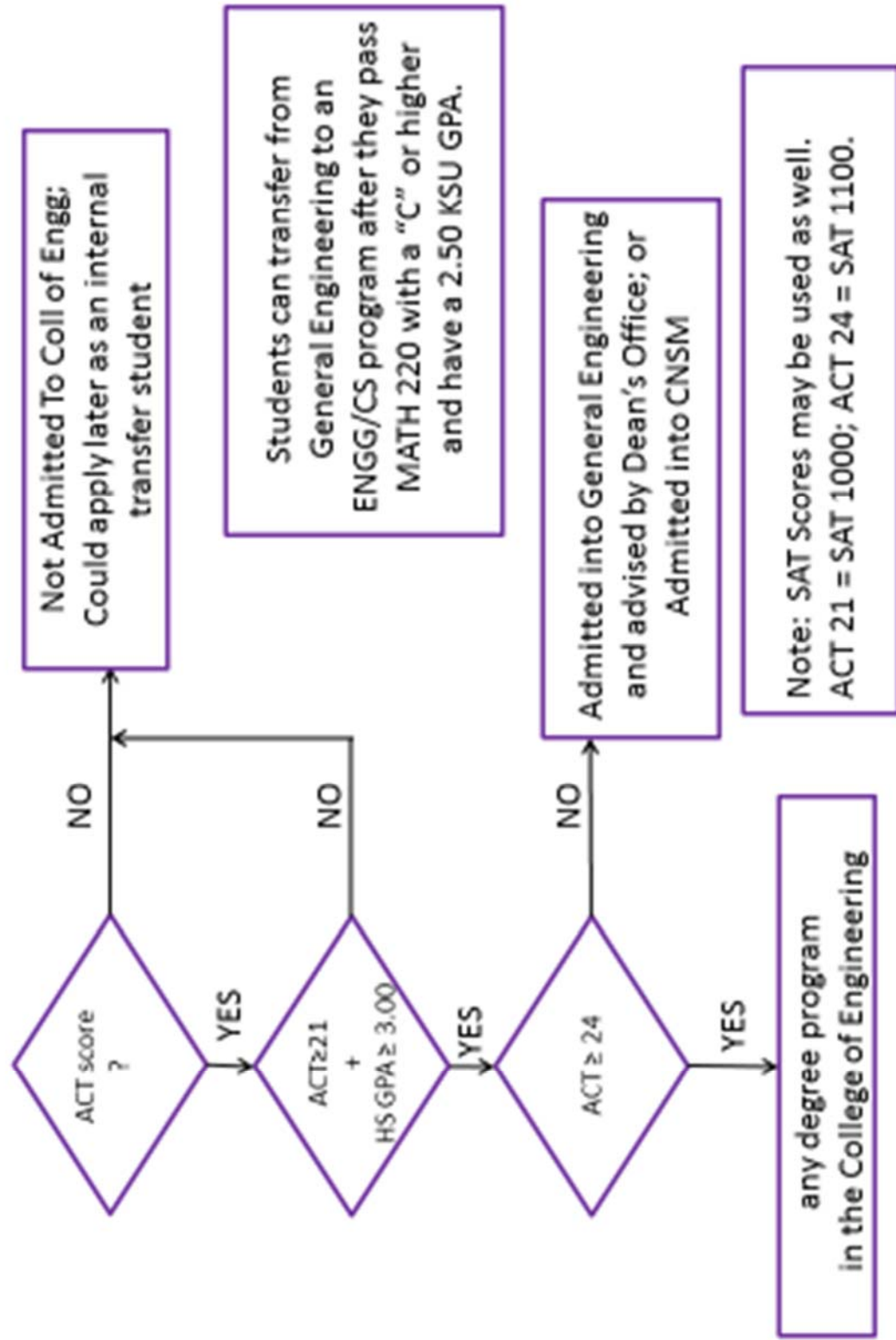
- 50% to 75% of the students with an ACT of 19 or lower leave the college
- 40% to 47% of the students with an ACT of 20-23 leave the college
- 76% of the students with a MATH ACT of 21 or lower earn a "D" or "F" in MATH 220. They need a "C" to move forward. Note: This does not include the number who dropped the course.

IMPACT

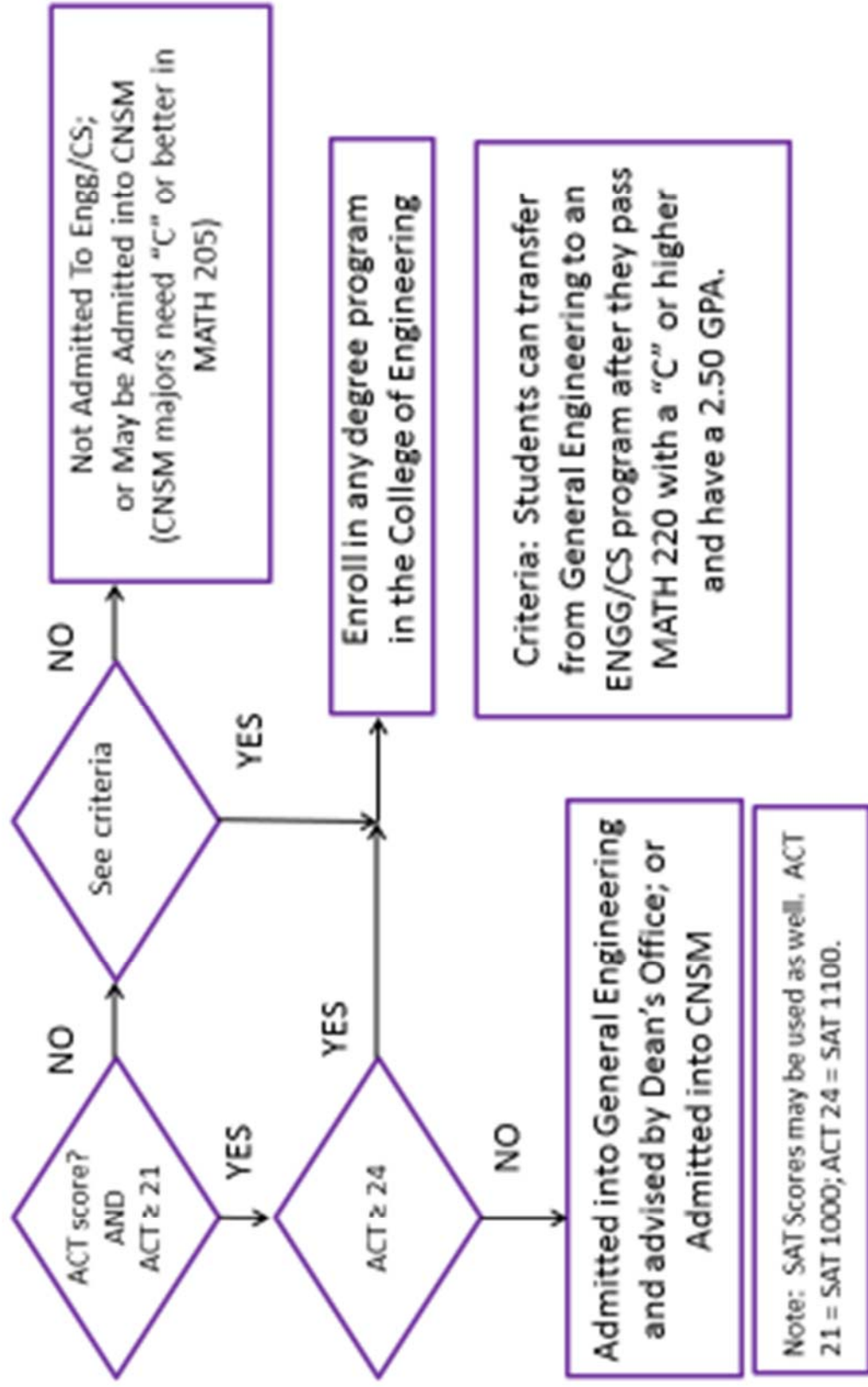
Revised: Fewer students will be admitted to the College of Engineering who are not prepared for the curriculum. It is expected that the total number of students will be less than 40 or 50. These students could be placed in Open Option or another college/department within the university. Some programs may be impacted by these additional students, but it is not expected that they would all go to the same program.

EFFECTIVE DATE: Fall 2017

New Students –102115



**Transfer Students (internal and external)
Must have been admitted by K-State
And K-State GPA ≥ 2.50 (internal) and ≥ 2.75 (external) 102115**



**Proposal for a
Graduate Certificate in Professional Interdisciplinary Sciences**

Basic Program Information

<i>Title of Program:</i>	Graduate Certificate in Professional Interdisciplinary Sciences
<i>Anticipated Start Date:</i>	Spring 2016
<i>Responsible Academic Unit:</i>	School of Applied and Interdisciplinary Studies
<i>Program Identification:</i>	CIP Code: 30.00 Multi-/Interdisciplinary Studies

Program Description

This 12-credit hour Graduate Certificate in Professional Interdisciplinary Sciences is designed to help K-State Olathe achieve the Johnson County Education Research Triangle (JCERT) mandate for the campus to provide graduate programming in food, animal health and related sectors, consistent with regional demand, K-State 2025 Visionary Plan, and the Kansas Board of Regents guidelines. The program will offer students the opportunity to enhance their current skills and abilities from an interdisciplinary perspective, making them more valuable to employers. The courses in this Graduate Certificate are also a part of the planned Professional Science Master's (PSM) in Applied Science and Technology, and the students can enroll in both the degree and the certificate. The Graduate Certificate can also be taken as a free standing option where the students are admitted to the Graduate School as non-degree students. The program will be supported by K-State Olathe funds.

The Graduate Certificate in Professional Interdisciplinary Sciences, as envisaged, is consistent with the goals for K-State's 2025 themes 1, 3, 4, 5 and 6, subject to the same policies, procedures and standards of excellence applied across the University. The unique advantage of programs offered at K-State Olathe is that, given their interdisciplinary focus, JCERT financial support, and close proximity to the Greater Kansas City area, they are well poised to foster exceptional, collaborative, and transformative opportunities for students and faculty at all K-State campuses, alumni and other stakeholders.

I. Statement of the Educational Objectives of the Graduate Certificate Program

Consistent with the K-State Graduate Handbook, Chapter 4: Graduate Certificate Programs, in "*the preferred model, students are enrolled in both a graduate degree program (master's or doctoral) and a graduate certificate program ... Some certificate programs are linked to specific graduate degree programs, such that they provide an interdisciplinary experience ...*" This Graduate Certificate in Professional Interdisciplinary Sciences is part of a master's degree program, the Professional Science Master in Applied Science and Technology (PSM) and provides an interdisciplinary experience.

To receive the certificate, students must complete the required 12 credit hours of graduate coursework which consists of a 3-credit core Interdisciplinary Process course and 9 credits from at least two disciplines approved by their advisory committee. Elective courses can be included up to 3 credits per course.

Upon successful completion of the Graduate Certificate in Professional Interdisciplinary Sciences, the students will be able to:

1. Demonstrate ability to use information, concepts, analytical approaches, and critical thinking skills to transform ideas or solutions into entirely new forms.
2. Demonstrate ability to perform in one or more disciplines outside of their own discipline.

As documented by both the University of Kansas and the Open University*, other benefits of offering multi-/interdisciplinary choices include:

1. Students are more highly motivated when they get to choose topics that are interesting to them. As a result, the learning becomes meaningful, purposeful and deeper, resulting in learning experiences that stay with the student for a lifetime.
2. Exploring topics across a range of subject boundaries motivates students to pursue new knowledge in different subject areas.
3. Critical thinking skills are used and developed as students look across disciplinary boundaries to consider other viewpoints.
4. Transferable skills of critical thinking, synthesis and research are developed and are applicable to future learning experiences.
5. Interdisciplinary knowledge and application of different disciplines can lead to greater creativity.

*Sources:

- 1) Buss, J, "Why Interdisciplinary Graduate Programs Attract Great Students", Research Mission of Public Universities, University of Kansas, <http://dept.ku.edu/~merrill/PDFfiles/buss.pdf>, (Retrieved August 2015)
- 2) The Open University, <http://www.open.edu/openlearn/education/what-are-the-benefits-interdisciplinary-study>, (Retrieved August 2015)

Admissions

Students pursuing the Graduate Certificate in Professional Interdisciplinary Sciences must be admitted to K-State's Graduate School. A student with a bachelor's degree and a cumulative grade point average of at least 3.0 from a regionally accredited institution can expect to be fully admitted to the certificate program. In addition to the Graduate School Application Form, applicants must submit: (1) official copies of transcripts for all undergraduate and graduate work and (2) a statement of goals that addresses the applicant's current professional experience and how the certificate will assist them in reaching personal and/or professional goals.

Course Delivery

Courses are delivered in a variety of formats including face to face, hybrid and online. This design allows for flexibility in meeting student needs and delivery preferences.

Length of Program

If students take two graduate courses in a semester (two at a time in a 16-week format or one at a time in an 8-week format) they can reasonably finish the graduate certificate within 12 months. Continuous progress is expected, so that if a student does not take classes for two years, they will be put on inactive status and must reapply to the program. Courses applied to the program of study may not be more than six years old when the certificate program is completed. To be awarded a graduate certificate, the student (a) must not be on probation, (b) must have a cumulative GPA of 3.0 or higher on graduate coursework and on coursework applied to the certificate, (c) must meet all the requirements of the Graduate School and the student's certificate program, (d) must be enrolled during the semester in which the certificate requirements are completed, and (e) must provide official transcripts for any approved transfer credits.

II. Certificate Program Courses

After taking a foundation course focused on the *Interdisciplinary Process* and relevant electives that integrate methods and analytical frameworks from more than one discipline, the students are expected to have a more comprehensive understanding of complex issues and enhanced ability to address broad and multi-faceted challenges. Courses are largely drawn from existing STEM and professional skills courses offered throughout K-State. The range of courses and disciplines that are made available reflects market and Johnson County Education Research Triangle needs

Program graduation requirements are 12 credit hours, summarized as follows:

Credits	Course Category	Description
3 credits	Foundation Course	AAI 801 Interdisciplinary Process
9 credits (Chosen from a minimum of two different disciplines, determined by the course prefix. Elective courses can be included up to 3 credits per course)	STEM Courses	STEM courses available to the PSM
	Professional Skills Courses	Professional Courses available to the PSM
12 credits	Total	

3 credits required/Foundation course:

AAI 801 Interdisciplinary Process (3 credits)

9 credits from at least two disciplines, determined by the course prefix. Elective courses can be included up to 3 credits per course selected from the following courses (or equivalent courses as approved by the student’s supervisory committee):

STEM

- ASI 671 Meat Selection and Utilization (2 credits)
- ASI 675 Monogastric Nutrition (1 credit)
- ASI 678 Equine Nutrition (1 credit)
- ASI 776 Meat Industry Technology (3 credits)
- BAE 815 Graduate Seminar in Agricultural Engineering (1 credit)
- BAE 820 Topics in Agricultural Engineering (1-18 credits)
- DMP 710 Introduction to One Health (2 credits)
- DMP 754 Introduction to Epidemiology (3 credits)
- DMP 802 Introduction to Environmental Health (3 credits)
- DMP 802 Environmental Health (3 credits)
- DMP 815 Multidisciplinary Thought and Presentation (3 credits)
- DMP 844 Global Health Issues (3 credits)
- DMP 870 Pathobiology Seminar MS (1 credit)
- DMP 880 Problems in Pathobiology MS (1-6 credits)
- DMP 888 Globalization, Cooperation, & the Food Trade (1 credit)
- DMP 895 Topics in Pathobiology MS (0-18 credits)
- FDSCI 600 Food Microbiology (2 credits)
- FDSCI 601 Food Microbiology Lab (2 credits)
- FDSCI 630 Food Science Problems (0-6 credits)
- FDSCI 690 Principles of HACCP (2 credits)
- FDSCI 695 Quality Assurance of Food Products (3 credits)
- FDSCI 961 Graduate Problem in Food Science (1-18 credits)
- HN 841 Consumer Research - Fundamentals (1 credit)
- HN 843 Consumer Research - Qualitative (1 credit)
- HN 848 Consumer Research - Quantitative (1 credit)
- HORT 725 Postharvest Technology and Physiology of Horticultural Crops (3 credits)
- HORT 780 Health-Promoting Phytochemicals and Physiology of Fruits and Vegetables (2 credits)
- HORT 790 Sustainable Agriculture (2 credits)
- HORT 791 Urban Agriculture (2 credits)
- HORT 793 Farm to Fork Produce Safety (2 credits)
- HORT 794 Urban Food Systems (2 credits)
- HORT 795 Urban Agriculture Study Tour (1 credit)

- STAT 703 Introduction to Statistical Methods for the Sciences (3 credits)
STAT 705 Regression and Analysis of Variance (3 credits)

Professional

- AAI 801 Interdisciplinary Process (3 credits)
AAI 840 Regulatory Aspects of Drug and Vaccine Development in Animal Health (2 credits)
AAI 858 Capstone Experience I (1 credit)
AAI 859 Capstone Experience II (2 credits)
COT 703 Project Management for Professionals (3 credits)
COT 704 Managerial Finances, Metrics, and Analytics (3 credits)
COT 706 Informatics and Technology Management (3 credits)
DMP 815 Multidisciplinary Thought and Presentation (3 credits)
DMP 816 Trade & Agricultural Health (2 credits)
DMP 888 Globalization, Cooperation, and Food Trade (1 credit)
EDACE 832 Interpersonal and Intrapersonal Dynamics (3 credits)
EDACE 834 Leading Adults in a Globalized and Diverse World (3 credits)
EDACE 835 Developing Teams and Leaders (3 credits)
EDACE 836 Group Dynamics (3 credits)
EDACE 886 Seminars in Adult Education (1-6 credits)

Students may also choose from the following:

- AAI 795 Topics in Applied and Interdisciplinary Studies (1-3 credits)
AAI 870 Seminar in Applied and Interdisciplinary Studies (1-6 credits)
AAI 880 Problems in Applied and Interdisciplinary Studies (1-6 credits)
AAI 895 Advanced Topics in Applied and Interdisciplinary Studies (1-6 credits)
AAI 899 Research in Applied and Interdisciplinary Studies (1-6 credits)

Course Descriptions:

The courses with AAI prefixes are new courses developed by the School for Applied and Interdisciplinary Studies, K-State Olathe.

AAI 795. Topics in Applied and Interdisciplinary Studies (1-3 credits)

Selected topics in applied and interdisciplinary studies.

AAI 801. Interdisciplinary Process (3 credits)

The overall goal of this course is for students to develop an understanding of and practice in design thinking as both a framework that allows interdisciplinary and cross-function teams to work together and as a process to generate imaginative and creative solutions to complex challenges and problems.

AAI 840. Regulatory Aspects of Drug and Vaccine Development in the Animal Health Industry (2 credits)

This course explores the topic of regulations associated with animal health product development and manufacturing. Topics for discussion will include an overview of the regulatory affairs process in the U.S. and other countries, drug and vaccine classifications and the approval process, GCP/GLP guidelines, drug and vaccine efficacy and safety testing, human and environmental safety issues, and future challenges and current industry needs.

AAI 858. Capstone Experience I (1 credit)

This course provides students the opportunity to synthesize and integrate knowledge in its application to professional practice. It is designed for students who intend to work in an applied professional setting where they are expected to critically apply existing knowledge and methods to solve problems. Students will complete a project on a topic of interest, in consultation with the instructor.

AAI 859. Capstone Experience II (2 credits)

This course provides students the opportunity to synthesize and integrate knowledge in its application to professional practice. It is designed for students who intend to work in an applied professional setting where they are expected to critically apply existing knowledge and methods to solve problems. Students will produce written reports and oral presentations on their project of focus.

AAI 870. Seminar in Applied and Interdisciplinary Studies (1-6 credits)

Student presentations and discussion of current topics and recent findings in applied and interdisciplinary studies.

AAI 880. Problems in Applied and Interdisciplinary Studies (1-6 credits)

Opportunity for advanced independent study of a specific problem or technique in applied and interdisciplinary studies. Topics selected jointly by student and instructor.

AAI 895. Advanced Topics in Applied and Interdisciplinary Studies (1-6 credits)

Focus on advanced topics in applied and interdisciplinary studies.

AAI 899. Research in Applied and Interdisciplinary Studies (1-6 credits)

Research with a focus on applied science and interdisciplinary studies.

ASI 671 - Meat Selection and Utilization (2 credits)

Emphasis on meat cut identification, muscle and bone anatomy, grades, fabricated meat, institutional cuts, specification writing, processing, meat preparation and shrinkage costs.

ASI 675 - Monogastric Nutrition (1 credit)

An overview of the nutritional principles involved with feeding nonruminants. Topics will include digestive anatomy and the metabolism of carbohydrates, lipids, amino acids, vitamins, and minerals.

ASI 678 - Equine Nutrition (1 credits)

Equine digestive anatomy and physiology. Nutrient requirements of the equine as they relate to growth, work, reproduction and lactation, as well as the relationship of nutrition to disease and environment. Practical management considerations and current equine nutrition research will be reviewed.

ASI 776 - Meat Industry Technology (3 credits)

Apply concepts and information about meat composition, product safety and spoilage, quality; formulation, processing and evaluation of cured, precooked, and sausage; packaging, troubleshooting, and plant organization. This is a web-based lecture class intended for distance education students.

BAE 815. Graduate Seminar in Agricultural Engineering (1 credit)

Presentation and discussion of research philosophies, procedures, and results.

BAE 820. Topics in Agricultural Engineering (1-18 credits)

A course reserved for study of current topics in agricultural engineering. Topics announced when offered.

COT 703. Project Management for Professionals (3 credits)

This course focuses on applied project management methodology, tools, and techniques. Topics include career aspects of project management; business factors affecting the project; project organization, planning, execution, and communications; the project life cycle; risk analysis; and best practices in project management.

COT 704. Managerial Finances, Metrics, and Analytics (3 credits)

Provides an overview of an organization's financial statements, with an emphasis on the interaction between people in management positions and those statements, as well as an examination of the business investment decision-making process. Explores the use of metrics and analytics to measure and improve managerial

performance.

COT 706. Informatics and Technology Management (3 credits)

Provides theoretical and practical experience in using information technology to support organizational decision-making processes. Provides tools in areas such as statistics, research methods, data mining, and information technology to develop solutions tailored to business problems.

DMP 710. Introduction to One Health (2 credits)

One Health encompasses the complex interrelationships among humans, animals, and the environment. This online course provides a broad introduction to One Health, incorporating original videos of leading experts, case studies, and scientific readings. It addresses zoonotic diseases and environmental issues that impact human, animal, and ecosystem health.

DMP 754. Introduction to Epidemiology (3 credits)

The purpose of this course is to introduce students to the basic principles and methods of epidemiology in order to recognize and understand how disease affects populations (and the associated implications for individuals). This course will prepare students to use epidemiologic methods to solve current and future challenges to diagnose, treat, prevent, and control disease during their professional training and throughout their career.

DMP 802. Environmental Health (3 credits)

Students will be exposed to professional practice of environmental sciences, epidemiology, toxicology, occupational health and industrial hygiene, and consumer health and safety. Topics include the methods for defining environmental contamination; identifying contaminants, pathogens and toxins; assessing risks and causality; determining health impact; ameliorating hazards; and protecting the population through waste management, regulatory programs, environmental inspections, food and product safety, and environmental policy.

DMP 815. Multidisciplinary Thought and Presentation (3 credits)

Training in critical thinking, writing, and speaking for the food, veterinary, plant, health, and related sciences. With emphasis on writing, students prepare technical reports, news releases, abstracts, and commentaries. Students prepare meeting agendas and present seminars. Committed students will emerge with enhanced critical-thinking and written-presentation skills.

DMP 816. Trade and Agricultural Health (2 credits)

This course considers the multilateral trading system as it relates to food safety, food security, animal health, plant health, and international cooperation. The course content will be of value to students interested in food safety and security, epidemiology, public health, agriculture, food science, security studies, political science, agricultural economics, veterinary medicine, and international relations.

DMP 844. Global Health Issues (3 credits)

A review of global health problems and various strategies to manage international health concerns. The class is open to graduate students, including veterinary students, with an interest in public health that have at least 12 hours in biology or related courses.

DMP 870. Pathobiology Seminar (MS) (1 credit)

Oral presentations on topics in epidemiology, food safety, immunology, microbiology, molecular biology, parasitology, pathology, and toxicology. Reports will include critical review of the relevant literature; experimental design and methodology; and presentation and critical evaluation of data. This course is for MS students.

DMP 880. Problems in Pathobiology (MS) (1-6 credits)

A special problems course for graduate students working toward the MS degree in Pathobiology. The course is generally problems-or-techniques-based in any of the disciplines in the Pathobiology program, conducted under the supervision of a graduate faculty in the Pathobiology Graduate Program.

DMP 888. Globalization, Cooperation, & the Food Trade (1 credit)

This course will include 15 45-minute lectures and/or reading assignments. They will be assessed through online quizzes and one essay project.

DMP 895. Topics in Pathobiology (MS) (0-18 credits)

A special course for graduate students working toward the MS degree. Lectures, readings, and discussion of topics of current interest in any of the disciplines of Pathobiology.

EDACE 832. Interpersonal and Intrapersonal Dynamics (3 credits)

This course explores various psychological and sociological factors that impact leadership. Through examining topics like verbal and nonverbal communication, active listening, learning and presentation styles, emotional intelligence, conflict, and motivation, students gain a deeper understanding of how these factors affect their personal leadership styles and impact adults they are leading.

EDACE 834. Leading Adults in a Globalized and Diverse World (3 credits)

This course provides an introduction to the foundations of adult leadership in the context of managing a culturally diverse workforce. Concepts of globalization as well as cross-cultural and international environments as they relate to adult leadership are emphasized through theory to practice projects and research.

EDACE 835. Developing Teams and Leaders (3 credits)

This course will examine how teams and leaders can be developed using theories from psychology, sociology, and learning principles. Through this course, students will be able to analyze when it is appropriate to use these tools, their strengths, weaknesses and limitations. To complement the course readings, students will be asked to share their professional experiences with team and leader development.

EDACE 836. Group Dynamics (3 credits)

This course focuses on group and team behavior and processes. Various factors that impact group behavior, processes, and effectiveness will be examined and participants will learn skills needed to more effectively manage and facilitate groups and teams of adults to achieve organizational objectives, accomplish tasks, and fulfill individual members' needs.

EDACE 886. Seminars in Adult Education (1-18 credits)

These seminars will consider research and professional development on the special interests of the students in the several fields of education represented.

FDSCI 600. Food Microbiology (2 credits)

This course deals with the isolation, identification, enumeration, and characterization of bacteria, yeasts, molds, and other microbes associated with foods and food processing. Effects of physical and chemical agents on micro-organisms will be studied. Microbiological problems in food spoilage, food preservation, food fermentation, and food-borne diseases will be discussed.

FDSCI 601. Food Microbiology Lab (2 credits)

Laboratory procedures involving isolation, identification, enumeration, and characterization of bacteria, yeasts, molds, and other microbes associated with foods and food processing.

FDSCI 630. Food Science Problems (0-18 credits)

Research or related work with others, or a literature search. Written reports are required. Any field of food science for which the student has adequate background.

FDSCI 690 - Principles of HACCP (2 credits)

A comprehensive study of the Hazard Analysis and Critical Control Point System and its application in the food industry.

FDSCI 695 - Quality Assurance of Food Products (3 credits)

A comprehensive course covering all aspects of quality assurance practices in the food industry. Emphasis is placed on interrelations of food chemistry, microbiology, sanitation, processing, and laws and regulations.

FDSCI 961. Graduate Problem in Food Science (1-18 credits)

In-depth study of a topic supervised by a member of the graduate faculty.

HN 841. Consumer Research – Fundamentals (1 credit)

Fundamentals of consumer research in terms of organizing and executing studies. Planning studies, selecting products, recruiting target consumers, and organizing study execution are included.

HN 843. Consumer Research – Qualitative (1 credit)

This course provides a deep dive into qualitative research, including the design, application, execution, and reporting. This course will educate the student on the appropriate tools for qualitative data collection based on the objectives, with a particular emphasis on interviews and focus groups.

HN 848. Consumer Research – Quantitative (1 credit)

Methods and issues associated with measuring consumer responses to products including preference testing, preference ranking, acceptance testing, hedonic scales, and consumption testing.

HORT 725. Postharvest Technology and Physiology of Horticultural Crops (3 credits)

A study of the principles and practices involved in the harvesting, handling and storage of horticultural products. The relationship of plant structure and physiology will be emphasized in discussing effects of postharvest handling and storage to maximize quality and shelf life of products.

HORT 780. Health-Promoting Phytochemicals and Physiology of Fruits and Vegetables (2 credits)

The course deals with various aspects of phytochemicals in plant-based foods including fruits and vegetables and their impact on human health and well-being. It includes potential effects of phytochemicals in promoting human health, preventing various diseases and fostering wellness. It also includes biosynthesis and metabolism of phytochemicals in plants. Emphasis is placed on developing strategies to improve the phytochemical content of food crops through approaches involving crop management, environmental and biotechnology tools. Two hours lecture per week.

HORT 790. Sustainable Agriculture (2 credits)

Historical perspectives of the sustainable agriculture movement in the U.S. and world-wide will be examined and critiqued. Components of sustainable agriculture such as agroecosystem theory, permaculture, energy use efficiency, and organic standards will be compared and evaluated. Students will demonstrate their understanding and application of the material by conducting research on a topic within sustainable agriculture and presenting the topic to the rest of the class.

HORT 791. Urban Agriculture (2 credits)

Students will become familiar with a wide variety of urban agriculture types and production systems utilized in urban settings. The course will include background readings, case studies, guest speakers, student-facilitated class discussion and lectures.

HORT 793. Farm to Fork Produce Safety (2 credits)

This course will cover all aspects of food safety for fresh produce grown in urban and rural environments, including pathogen ecology and production aspects as well as pre-harvest and postharvest factors that influence the risk of microbial contamination. More specifically, we will discuss ways to minimize the risk of human pathogens on fresh produce using strategies such as the implementation of Good Agricultural Practices (GAPs) and Good Handling Practices (GHPs). The course will cover postharvest interventions that are currently used (chemical sanitizers) as well as innovative technology applications like physical

treatments, irradiation, and biological control techniques. Additionally, students will explore the impact of foodborne outbreaks on public health and the fresh produce industry in terms of economics, consumer acceptance, and legal aspects.

HORT 794. Urban Food Systems (2 credits)

This course will cover all components of urban food systems through the lens of food security, food justice, access, policy, and community planning. Students will gain skills in grant-writing, non-profit planning and management, and working with urban policy and planning boards.

HORT 795. Urban Agriculture Study Tour (1 credit)

Faculty-led trip for students to explore leading examples of urban agriculture. Each year, a trip will occur within North America, lasting approximately 7 days. The study tours will focus on urban food system development in major cities and will highlight examples of how food is being grown in urban areas and the impacts that it has on the community.

STAT 701. Fundamental Methods of Biostatistics (3 credits)

A course emphasizing concepts and practices of statistical data analysis for the health sciences. Basic techniques of descriptive and inferential statistical methods applied to health related surveys and designed experiments. Populations and samples, parameters and statistics; sampling distributions for hypothesis testing and confidence intervals for means and proportions involving one sample, paired samples and multiple independent samples; odd ratios, risk ratios, simple linear regression.

STAT 703. Introduction to Statistical Methods for the Sciences (3 credits)

Statistical concepts and methods applied to experimental and survey research in the sciences; tests of hypotheses, parametric and rank tests; point estimation and confidence intervals; linear regression; correlation; one-way analysis of variance; contingency tables, chi-square tests.

STAT 705. Regression and Analysis of Variance (3 credits)

Simple and multiple linear regression, analysis of covariance, correlation analysis, one-, two-, and three-way analysis of variance; multiple comparisons; applications including use of computers; blocking and random effects.

III. Statement of How the Courses Are Associated with the Certificate

There are two categories of courses, both of which are consistent with regional demand. The first consists of graduate courses in STEM that are available to students at the K-State Olathe campus. The second category is comprised of courses that provide professional skills, and also meet the requirements of the Professional Science Master's. These skills are commonly cited by employers as being crucial to employee success. Local needs assessments were done to identify educational programming market demand for K-State Olathe, and input was collected from Johnson County firms representing 59,567 employees. The results were then used as a basis in selecting which courses to include.

IV. Statement of Need

The need for this program has been documented through multiple market demand studies over the past 5 years, conducted by both K-State experts and independent consultants. Market demand information was quantified through surveys of more than 100 employers across 6 economic sectors in the Kansas City area. Additionally, K-State Olathe faculty and staff have collected qualitative input through focused discussions with regional employers and employees over the last 3 years and strategic planning sessions with the K-State Olathe advisory board over the last 2 years. The market survey by Vincent Amanor-Boadu and K. Renee Stoneman of Kansas State University obtained information on 449 respondents' preferences for academic credentials, with preferences ranging from continuing education credit through graduate certificates to degrees. They found that 62 percent of respondents would be interested in some form of a continuing education credit, 57 percent in a certificate, and 54 percent in a degree.

According to the data compiled by the Austin Peters Group, Inc., based on estimates provided by firms primarily located in Johnson County, KS and representing 59,567 employees (20% of the workforce in Johnson County, KS), there may be more than 200 working professionals, annually, who would be interested in pursuing *Professional Science* credentials. The Graduate Certificate will allow those and others to obtain a Graduate Certificate as part of the Professional Science Master's (PSM) or as a stand-alone option. The Austin Peters Group, Inc. in coordination with the Kansas Department of Labor and the Missouri Department of Labor found that occupational areas where a PSM and related skills would be highly valued are projected to grow for at least 10 years.

The Brookings's Institute 2014 report states that "*Greater Kansas City has a skilled workforce, but is not educating and retaining enough workers to meet future demand.*". It also stated "*The region has not produced enough highly educated or STEM-qualified workers to keep pace with employers' demand, and its ability to attract talent from elsewhere has diminished.*" While there are other STEM programs provided in the area, they are inadequate to keep up with the demand, and no program exists in the region or at other Regents universities similar to K-State Olathe's proposed Graduate Certificate in Professional Interdisciplinary Sciences.

Sources:

- 3) Needs Assessment for Educational Programming, K-State Olathe Innovation Campus, Market demand report prepared by Beth Tatarko, Vice President, The Austin Peters Group, Inc., Overland Park, KS (March, 2010)
- 4) Educational and Professional Development Needs in the Animal Health Corridor, Market demand survey report by Dr. Vincent Amanor-Boadu, Associate Professor of Agribusiness Economics and Management, and K. Renee Stoneman, Graduate Student of Agribusiness Economics, Kansas State University. (Dec, 2010)
- 5) Kansas City Region Industry Interviews and Recommendations Report, K-State Olathe Advisory Board, 2012-2014
- 6) Prosperity at a Crossroads: Targeting Drivers of Economic Growth in Greater Kansas City, Report published by Mid-America Regional Council and the Brookings (Institute) Metropolitan Policy Program (June, 2014)
- 7) Resolution of the Johnson County Education Research Triangle Authority Board of Directors (Undated)

V. Description of the Certificate Program Administration

The proposed Graduate Certificate in Professional Interdisciplinary Sciences will be administered under the auspices of the K-State Olathe campus, School of Applied and Interdisciplinary Studies. Dr. Janice Barrow, the Associate Dean for Academic Affairs and Executive Education, will serve as Program Director, assist students in successful completion of the program, and also serve as the primary program administrator and contact for the certificate program. Additional administrative support will be provided by the Olathe-based Academic Affairs unit to include a Director of Student Services who is also responsible for recruitment and career placement; a Program Manager responsible for the day-to-day efficiency of academic operations; a Program Assistant responsible for student life activities; and Student Help Desk IT support. Additional academic support services for the program will be provided by staff located at K-State Olathe. These services include assistance for prospective student inquiries, admissions advising and other support already available for the 8 graduate degree programs currently offered for students at the K-State Olathe campus. The K-State Graduate School and Libraries, as well as faculty and staff from 6 colleges and 9 departments, already provide support to the K-State Olathe campus through various modalities.

VI. Estimated Budget

Instruction will be provided by existing full-time K-State faculty who are already fully supported by the University, with the potential to add qualified faculty and instructors if the demand warrants. All expenses are expected to be covered by: 1) utilizing unused capacity in existing courses, 2) revenue from tuition, and 3) JCERT funds. No additional resources will be required.

VII. Names of Faculty Leading and Contributing to the Certificate Program

Initial program faculty support is to be provided by K-State faculty from the Olathe, Manhattan and Salina campuses. The program also has the benefit of industry/expert practitioners in the form of a 12-member External Advisory Board. There will be new faculty hires to accommodate program growth, as appropriate, through the School for Applied and Interdisciplinary Studies.

Attached, is the support agreement signed by the President, Provost, all the Deans and Department Heads of the academic units offering courses as part of the curriculum, and by the proposed Program Director. Also attached is the letter of support from the 12 member External Advisory Board that will assist with clarifying program objectives, identifying expected learning and professional development outcomes, and ensuring that regional workforce needs will be met.

Core Instructional Faculty

Elizabeth Boyle, PhD, Professor and Extension Specialist, Animal Sciences and Industry (Tenured)
Teresa Douthit, PhD, Associate Professor, Animal Sciences and Industry (Tenured)
Kelly Getty, PhD, Associate Professor, Animal Sciences and Industry (Tenured)
Sara Gragg, PhD, Assistant Professor, Animal Sciences and Industry (Tenure Track) (Olathe Based)
Curtis Kastner, PhD, Professor and Director Food Science Institute (Tenured)
Justin Kastner, PhD, Associate Professor, Diagnostic Medicine/Pathobiology (Tenured)
Robert Larson, PhD, Professor, Diagnostic Medicine/Pathobiology (Tenured)
Edgar E. and M. Elizabeth Coleman Chair for Food Animal Production Medicine
Executive Director, Veterinary Medical Continuing Education
Annelise Nguyen, PhD, Associate Professor, Diagnostic Medicine/Pathobiology (Tenured)
Eleni Pliakoni, PhD, Assistant Professor, Horticulture, Forestry and Recreation Resources (Tenure Track) (Olathe Based)
C.B. Rajashekar, PhD, Professor, Horticulture, Forestry and Recreation Resources (Tenured)
Karen Schmidt, PhD, Professor, Animal Sciences and Industry (Tenured)
Candice Shoemaker, PhD, Department Head and Professor, Horticulture, Forestry and Recreation Resources (Tenured)

Supplemental Faculty

Paige Adams, PhD, DVM, Research Assistant Professor, K-State Olathe (Non-Tenure Track) (Olathe Based)
Deborah Briggs, PhD, Adjunct Faculty, Diagnostic Medicine Pathobiology (Non-Tenure Track)
Executive Director, Global Alliance for Rabies Control
Kathy Brockway, MS, Professor, College of Technology and Aviation (Tenured)
Raju Dandu, PhD, Professor, College of Technology and Aviation (Tenured)
Judy Favor, PhD, Assistant Professor, Educational Leadership (Non-Tenure Track) (Olathe Based)
Trisha Moore, PhD, Assistant Professor, Biological and Agricultural Engineering (Tenure Track)
Abbey Nutsch, PhD, Assistant Professor, Animal Sciences and Industry (Non-Tenure Track)
Mark Sorell, MS, Part-time Instructor, Graduate Faculty Associate, K-State Olathe (Non-Tenure Track) (Olathe Based)
Marianne Swaney-Stueve, PhD, Research Assistant Professor, Human Nutrition (Non-Tenure Track) (Olathe Based)
Andi Witczak, MFA, Research Assistant Professor, K-State Olathe (Non-Tenure Track) (Olathe Based)
Susan Yelich Binieki, PhD, Assistant Professor, Educational Leadership (Tenure Track)
Jeff Zacharakis, EdD, Associate Professor, Educational Leadership (Tenured)

Among the 12 core faculty members, six are professors, four are associate professors, and two are assistant professors. Ten are tenured, and two are tenure-track but not yet tenured. All 12 have terminal degrees.

Among the 12 supplemental faculty members, two are professors, one is an associate professor, four are assistant professors, three are research assistant professors, and two are part time/adjunct faculty. Three are tenured, two are tenure-track, and seven are non-tenure track. Ten have terminal degrees.

All courses that form part of the Graduate Certificate are also part of the faculty members' in load teaching requirements.

No graduate assistants will be required.

Program Coordinators

Dr. Janice Barrow
Associate Dean for Academic Affairs and
Executive Education/ Associate Professor
Phone: 913-307-7342
Email: jbarrow@k-state.edu

Dana Reinert
Program Manager
Phone: 913-307-7340
Email: danamary@k-state.edu

**CURRICULUM OUTLINE
NEW DEGREE PROPOSALS
Kansas Board of Regents**

I. Identify the new degree:

Graduate Certificate in Professional Interdisciplinary Sciences

II. Provide courses required for each student in the major:

	Course Name & Number	Credits
Core	AAI 801. Interdisciplinary Process	3
Electives	<i>9 credits of electives selected from the following courses (or equivalent courses as approved by the student's supervisory committee). Elective courses can be included up to 3 credits per course:</i>	
	AAI 795. Topics in Applied and Interdisciplinary Studies	1-3
	AAI 840. Regulatory Aspects of Drug/Vaccine Development in Animal Health	2
	AAI 870. Seminar in Applied and Interdisciplinary Studies	1-6
	AAI 858. Capstone Experience I	1
	AAI 859. Capstone Experience II	2
	AAI 880. Problems in Applied and Interdisciplinary Studies	1-6
	AAI 895. Advanced Topics in Applied and Interdisciplinary Studies	1-6
	AAI 899. Research in Applied and Interdisciplinary Studies	1-6
	ASI 671. Meat Selection and Utilization	2
	ASI 675. Monogastric Nutrition	1
	ASI 678. Equine Nutrition	1
	ASI 776. Meat Industry Technology	3
	BAE 815. Graduate Seminar in Agricultural Engineering	1
	BAE 820. Topics in Agricultural Engineering	1-18
	COT 703. Project Management for Professionals	3
	COT 704. Managerial Finances, Metrics, and Analytics	3
	COT 706. Informatics and Technology Management	3
	DMP 710. Introduction to One Health	2
	DMP 754. Introduction to Epidemiology	3
	DMP 802. Environmental Health	3
	DMP 815. Multidisciplinary Thought and Presentation	3
	DMP 816. Trade and Agricultural Health	2
	DMP 844. Global Health Issues	3
	DMP 870. Pathobiology Seminar (MS)	1
	DMP 880. Problems in Pathobiology (MS)	1-6
	DMP 888. Globalization, Cooperation, & the Food Trade	1
	DMP 895. Topics in Pathobiology (MS)	0-18
	EDACE 832. Interpersonal and Intrapersonal Dynamics	3
	EDACE 834. Leading Adults in a Globalized and Diverse World	3

EDACE 835. Developing Teams and Leaders	3
EDACE 836. Group Dynamics	3
EDACE 886. Seminars in Adult Education	1-18
FDSCI 600. Food Microbiology	2
FDSCI 601. Food Microbiology Lab	2
FDSCI 630. Food Science Problems	0-18
FDSCI 690. Principles of HACCP	2
FDSCI 695. Quality Assurance of Food Products	3
FDSCI 961. Graduate Problem in Food Science	1-18
HN 841. Consumer Research – Fundamentals	1
HN 843. Consumer Research – Qualitative	1
HN 848. Consumer Research – Quantitative	1
HORT 725. Postharvest Technology and Physiology of Horticultural Crops	3
HORT 780. Health-Promoting Phytochemicals/Physiology of Fruits/Vegetables	2
HORT 790. Sustainable Agriculture	2
HORT 791. Urban Agriculture	2
HORT 793. Farm to Fork Produce Safety	2
HORT 794. Urban Food Systems	2
HORT 795. Urban Agriculture Study Tour	1
STAT 701. Fundamental Methods of Biostatistics	3
STAT 703. Introduction to Statistical Methods for the Sciences	3
STAT 705. Regression and Analysis of Variance	3

Research N/A

Practica N/A

Total credits required 12

IMPLEMENTATION YEAR FY 2017

Fiscal Summary for Proposed Academic Programs

Institution: Kansas State University

Proposed Program: Graduate Certificate in Professional Interdisciplinary Sciences

Part I. Anticipated Enrollment	Implementation Year		Year 2		Year 3	
	Full-Time	Part-Time	Full-Time	Part-Time	Full-Time	Part-Time
A. Full-time, Part-time Headcount:	2	8	2	8	2	8
B. Total SCH taken by all students in program	120		120		120	
Part II. Program Cost Projection						
A. In <u>implementation</u> year one, list all identifiable General Use costs to the academic unit(s) and how they will be funded. In subsequent years, please include only the additional amount budgeted.						
		Implementation Year	Year 2	Year 3		
<u>Base Budget</u>	Salaries	\$0	\$0	\$0		
	OOE	\$1,000	\$1,000	\$1,000		
	Total	\$1,000	\$1,000	\$1,000		

Indicate source and amount of funds if other than internal reallocation:

1) Internal reallocation made possible by excess capacity in existing courses, 2) revenue from tuition, and 3) JCERT funds

This budget assumes the following for Part I:

Full-time students and part-time students will be able to complete the program (12 credits) during one academic year.

This budget assumes the following for Part II:

The instruction will be provided by existing K-State faculty who are already fully supported by the University.

The "Other Expenses" include materials and supplies for courses, marketing materials, and travel.

Marketing will be managed by the K-State Olathe marketing team and K-State Division of Communications & Marketing.

School of Applied and Interdisciplinary Studies

Professional Science Master in Applied Science and Technology
Graduate Certificate in Professional Interdisciplinary Sciences, and
Graduate Certificate in Professional Skills for STEM Practitioners

Agreement of Support

The Professional Science Master in Applied Science and Technology, the Graduate Certificate in Professional Interdisciplinary Sciences, and the Graduate Certificate in Professional Skills for STEM Practitioners (referred to as “Programs”), are proposed interdisciplinary programs to be offered through the School of Applied and Interdisciplinary Studies at the K-State Olathe Campus.

This agreement of support is entered into between K-State Olathe Innovation Campus, Inc., through its School of Applied and Interdisciplinary Studies, and Kansas State University, through its colleges and departments indicated with the signatures below. This agreement of supports is required as part of the interdisciplinary graduate program approval process.

The courses for the Programs will be accessible from the Olathe campus and utilize courses offered at the Olathe campus or online from multiple departments and other academic units across Kansas State University.

Goals and expected benefits include:

1. K-State compliance with the JCERT mandate for K-State Olathe to provide education programs and meet enrollment goals for the campus.
2. Utilize unused capacity in existing courses, facilities and infrastructure.
3. Leverage the Olathe location and funding opportunity for consulting, collaboration and growth, consistent with the K-State 2025 Visionary Plan

The School of Applied Science and Interdisciplinary Studies, will:

1. Manage the Programs and ensure the Programs meet all K-State Graduate School and Kansas Board of Regents requirements for graduate programs.
2. Ensure that policies and procedures are implemented for the Programs’ development, assessment, and quality assurance.
3. Provide input, via the Olathe CEO, or designee, to the Manhattan-based or Salina-based colleges/departments relevant to the teaching effectiveness and performance of the Manhattan-based or Salina-based faculty providing courses as part of the Olathe Programs. This input may be used to determine assignment of faculty to teach courses as part of the Olathe Programs and considered in applicable evaluation processes.
4. Provide remuneration and support to participating Manhattan-based or Salina-based colleges/departments in the form of tuition distribution as follows:

Tuition: Olathe tuition consists of resident graduate tuition and a campus fee. The tuition is set at the same level as resident graduate tuition on the Manhattan campus.

Online courses: Any courses taught on-line as part of the Olathe Programs will be billed at tuition rates as determined through Global Campus practices.

Face-to-face: Two basic scenarios will exist for face-to-face courses in Olathe. Courses will either be taught by Olathe-based faculty, who shall be funded by Olathe, or will be taught by Manhattan-based or Salina-based faculty, who shall be funded by the Manhattan or Salina colleges/departments. If taught by Olathe-based faculty, the Olathe campus will retain all of the tuition that students pay for the course (except for the college fee returned to the colleges). If the course is taught by Manhattan-based or Salina-based faculty, Olathe will reimburse the colleges \$200 per student credit hour for face-to-face courses. The \$200 per student credit hour reimbursement will be increased commensurate with tuition increases in the future.

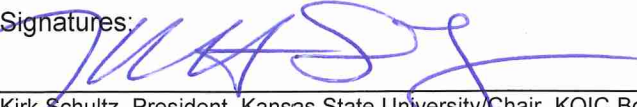
Colleges/departments expenses and faculty support: The Manhattan-based or Salina-based colleges/departments shall be responsible for Manhattan-based or Salina-based faculty travel and other support costs based upon their own policies and practices. Olathe will provide office and support space, classrooms and laboratories, IT infrastructure and support, custodial, security, and other campus support at Olathe for the faculty teaching at Olathe.

The Manhattan-based or Salina-based participating colleges/departments, whose signatures appears below, in collaboration with the School of Applied Science and Interdisciplinary Studies, are in support of the proposed Programs and are committed to their success, and will:

1. Ensure the consistent, predictable availability of graduate courses from their departments, which are part of the Olathe Programs, as listed in the curriculum attached as Appendix "A".
2. Consistent with faculty availability, expertise and interest: (i) encourage faculty to serve as Graduate Supervisory Committee members for the Programs; and (ii) encourage faculty to participate in the academic components of the Capstone Experience Courses.
3. Assure expeditious resolution of any curricular issues related to the Programs brought forward by the Programs' Director.

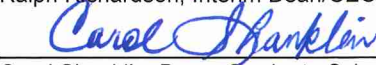
To the extent there are any irreconcilable differences in carrying out the terms of this Agreement or in the delivery of the Programs, the Provost and Senior Vice President of Kansas State University shall have authority to provide and direct implementation of the final decision on behalf of all parties.

Signatures:

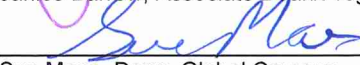

 Kirk Schultz, President, Kansas State University/Chair, KOIC Board
 Date: 9-10-15

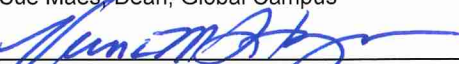

 April Mason, Provost and Senior Vice President, Kansas State University
 Date: 10 Sept 15



 Ralph Richardson, Interim Dean/CEO, Kansas State University-Olathe
 Date: 14 Sept 2015

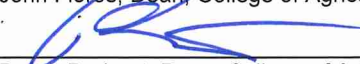

 Carol Shanklin, Dean, Graduate School
 Date: 9-14-15

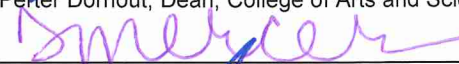

 Janice Barrow, Associate Dean/Programs Director, Kansas State University-Olathe
 Date: 9-10-2015


 Sue Maes, Dean, Global Campus
 Date: 9-14-15

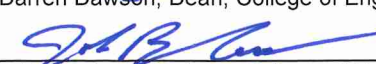

 Verna Fitzsimmons, CEO/Dean, Kansas State University-Salina
 Date: 9-14-15

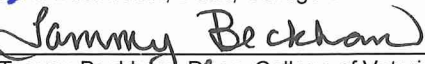

 John Flores, Dean, College of Agriculture
 Date: 9-14-15


 Peter Dorhout, Dean, College of Arts and Science
 Date: 14 Sept 2015


 Debbie Mercer, Dean, College of Education
 Date: 9.14.15


 Darren Dawson, Dean, College of Engineering
 Date: 9/14/15


 John Buckwalter, Dean, College of Human Ecology
 Date: 9-14-15


 Tammy Beckham, Dean, College of Veterinary Medicine,
 Date: 9-14-15


 Ken Odde, Dept. Head, Animal Science and Industry
 Date: 9-11-15



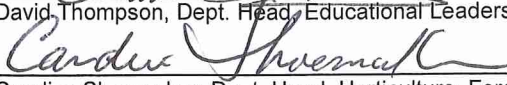
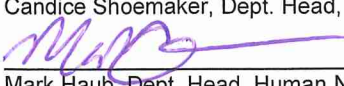
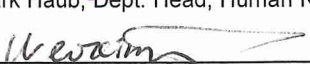

 Joe Harner, Dept. Head, Biological & Agricultural Engineering
 Date: 09/15/15

School of Applied and Interdisciplinary Studies

Professional Science Master in Applied Science and Technology
Graduate Certificate in Professional Interdisciplinary Sciences, and
Graduate Certificate in Professional Skills for STEM Practitioners

Agreement of Support

Signatures continued:

	9/14/15
M.M. Chengappa, Dept. Head, Diagnostic Medicine/Pathobiology	Date
	9/12/15
David Thompson, Dept. Head, Educational Leadership	Date
	9-11-15
Candice Shoemaker, Dept. Head, Horticulture, Forestry, and Recreation Resources	Date
	9/15/15
Mark Haub, Dept. Head, Human Nutrition	Date
	9/11/2015
Weixing Song, Interim Dept. Head, Statistics	Date

Appendix A

Agreement of Support

Professional Science Master in Applied Science and Technology
 Graduate Certificate in Professional Interdisciplinary Sciences, and
 Graduate Certificate in Professional Skills for STEM Practitioners

Curriculum Courses

STEM					
Course Number	Course Title (credits)	Format	Frequency	Instructor	Base for Instructor
ASI 671	Meat Selection and Utilization (2 credits)	Online	Fall	Curtis Kastner	Manhattan
ASI 675	Monogastric Nutrition (1 credit)	Online	Fall	Teresa Douthit	Manhattan
ASI 678	Equine Nutrition (1 credit)	Online	Fall, odd years	Teresa Douthit	Manhattan
ASI 776	Meat Industry Technology (3 credits)	Online	Fall, Spring, Summer	Kelly Getty	Manhattan
BAE 815	Graduate Seminar in Agricultural Engineering (1 credit)	F2F Olathe	Fall, Spring	Trisha Moore / Rotates	Olathe/Manhattan
BAE 820	Topics in Agricultural Engineering (1-6 credits)	F2F Olathe	Fall, Spring	Mei He / Rotates	Olathe
DMP 710	Introduction to One Health (2 credits)	F2F Olathe, Online	Fall	Paige Adams	Olathe
DMP 754	Introduction to Epidemiology (3 credits)	Online	Fall	Bob Larson	Manhattan
DMP 802	Introduction to Environmental Health (3 credits)	Online	Spring	Annelise Nguuyen	Manhattan
DMP 815	Multidisciplinary Thought and Presentation (3 credits)	F2F Olathe	Fall, Spring	Kastner / Nutsch	Manhattan
DMP 844	Global Health Issues (3 credits)	Online	Spring	Debbie Briggs	Manhattan
DMP 870	Pathobiology Seminar MS (1 credit)	F2F Olathe	Fall, Spring, Summer	Paige Adams	Manhattan
DMP 880	Problems in Pathobiology MS (1-3 credits)	F2F Olathe	Fall, Spring, Summer	Variable	Manhattan
DMP 888	Globalization, Cooperation, & the Food Trade (1 credit)	Online	Fall, Spring	Justin Kastner	Manhattan
DMP 895	Topics in Pathobiology MS (1-3 credits)	F2F Olathe, Online	Fall, Spring, Summer	Variable	Manhattan
FDSCI 600	Food Microbiology (2 credits)	F2F Olathe, Online	Fall	Sara Gragg / Rotates	Olathe
FDSCI 601	Food Microbiology Lab (2 credits)	F2F Olathe, Online	Fall	Sara Gragg / Rotates	Olathe
FDSCI 630	Food Science Problems (0-6 credits)	F2F Olathe, Online	Fall, Spring, Summer	Sara Gragg	Olathe
FDSCI 690	Principles of HACCP (2 credits)	Online	Fall	Elizabeth Boyle	Manhattan
FDSCI 695	Quality Assurance of Food Products (3 credits)	Online	Fall	Karen Schmidt	Manhattan
FDSCI 961	Graduate Problem in Food Science (1-6 credits)	F2F Olathe, Online	Fall, Spring, Summer	Sara Gragg	Olathe
HN 841	Consumer Research - Fundamentals (1 credit)	F2F Olathe	Fall	Marianne Swaney-Stueve	Olathe
HN 843	Consumer Research - Qualitative (1 credit)	F2F Olathe	Fall	Marianne Swaney-Stueve	Olathe
HN 848	Consumer Research - Quantitative (1 credit)	F2F Olathe	Fall	Marianne Swaney-Stueve	Olathe
HORT 725	Postharvest Technology and Physiology of Horticultural Crops (3 credits)	F2F Olathe	Fall, even years	Pliakoni	Olathe
HORT 780	Health-Promoting Phytochemicals and Physiology of Fruits and Vegetables (2 credits)	F2F Olathe	Spring	Rajashakar	Manhattan
HORT 790	Sustainable Agriculture (2 credits)	F2F Olathe	Fall, odd years	Janke and Pliakoni	Manhattan
HORT 791	Urban Agriculture (2 credits)	F2F Olathe	Fall	Janke and Pliakoni	Manhattan
HORT 793	Farm to Fork Food Safety (2 credits)	F2F Olathe	Fall, even years	Gragg and Pliakoni	Olathe
HORT 794	Urban Food Systems (2 credits)	F2F Olathe	Spring, even years	Pliakoni and Shoemaker	Olathe
HORT 795	Urban Agriculture Study Tour (1 credit)	F2F Olathe	Fall, Spring, Summer	Pliakoni	Olathe
STAT 701	Fundamental Methods of Biostatistics (3 credits)	F2F Olathe	Fall, Spring, Summer	Mark Sorell	Olathe
STAT 703	Introduction to Statistical Methods for the Sciences (3 credits)	F2F Olathe	Fall, Spring, Summer	Mark Sorell	Olathe
STAT 705	Regression and Analysis of Variance (3 credits)	F2F Olathe	Fall, Spring, Summer	Mark Sorell	Olathe
Professional					
Course Number	Course Title (credits)	Format	Frequency	Instructor	Base for Instructor
AAI 801	Interdisciplinary Process (3 credits)	F2F Olathe	Fall, Spring	Andi Witzcak	Olathe
AAI 840	Reg. Aspects of Drug and Vacc Dev. in Animal Health (2 credits)	Hybrid	Fall	Paige Adams/Mike Apley	Olathe
COT 703	Project Management for Professionals (3 credits)	Online	Fall	Raju Dandu	Salina
COT 704	Managerial Finances, Metrics, and Analytics (3 credits)	Online	Spring	Kathy Brockway	Salina
COT 706	Informatics and Technology Management (3 credits)	Online	Spring	Raju Dandu	Salina
DMP 815	Multidisciplinary Thought and Presentation (3 credits)	F2F Olathe	Fall, Spring	Kastner / Nutsch	Manhattan
DMP 816	Trade & Agricultural Health (2 credits)	Online	Spring	Justin Kastner	Manhattan
DMP 888	Globalization, Cooperation, and Food Trade (1 credit)	Online	Fall, Spring	Justin Kastner	Manhattan
EDACE 832	Interpersonal and Intrapersonal Communications (3 credits)	F2F Olathe, Online	Spring, Summer	Judy Favor	Olathe
EDACE 834	Leading Adults in a Globalized and Diverse World (3 credits)	F2F Olathe, Online	Fall	Susan Yelich Binieki	Manhattan
EDACE 835	Developing Teams & Leaders (3 credits)	F2F Olathe, Online	Spring	Jeff Zacharakia	Manhattan
EDACE 836	Group Dynamics (3 credits)	F2F Olathe, Online	Spring, Summer	Judy Favor	Olathe
EDACE 886	Seminars in Adult Education (1-6 credits)	F2F Olathe, Online	On demand	Rotates	Olathe
Students may also choose from the following K-State Olathe based courses					
AAI 795	Topics in Applied and Interdisciplinary Studies (1-3 credits)				
AAI 870	Seminar in Applied and Interdisciplinary Studies (1-6 credits)				
AAI 880	Problems in Applied and Interdisciplinary Studies (1-6 credits)				
AAI 895	Advanced Topics in Applied and Interdisciplinary Studies (1-6 credits)				
AAI 899	Research in Applied and Interdisciplinary Studies (1-6 credits)				
Capstone					
Course Number	Course Title (credits)	Format	Frequency	Instructor	Base for Instructor
AAI 858	Capstone Experience I (1 credits)	F2F, Online, Hybrid	On demand	Janice Barrow	Olathe
AAI 859	Capstone Experience II (2 credits)	F2F, Online, Hybrid	On demand	Janice Barrow	Olathe

Note: Courses may be added or deleted in response to demand and stakeholder needs.

Proposed Professional Science Master and Graduate Certificate at K-State Olathe

March 24, 2015

Janice Barrow
Associate Dean for Academic Affairs and Executive Education
Kansas State University Olathe Innovation Campus

Dear Dr. Barrow,

In my capacity as Chair of the K-State Olathe Advisory Board, I am pleased that discussions about offering a degree program geared to the needs of businesses in the greater KC metro are being developed. I understand that the proposed Professional Science Master in Applied Science and Technology, and proposed Graduate Certificate in Professional Interdisciplinary Sciences are designed for K-State Olathe to be compliant with the Johnson County Education Research Triangle (JCERT) mandate which is for the campus to provide graduate programming in food, animal health and related sectors, consistent with regional demand.

As members of the Advisory Board, we further understand that the programs require the input and support of *“an active external advisory board that will assist with clarifying program objectives, identifying expected learning and professional development outcomes, and ensuring that regional workforce needs will be met”*.

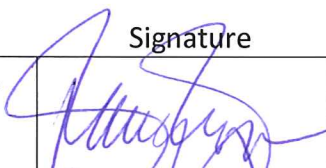
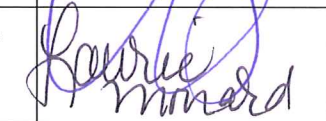
It is with the foregoing understanding that I and other Board members offer our support for the program development and delivery pending program approval by the University and Kansas Board of Regents.

Sincerely

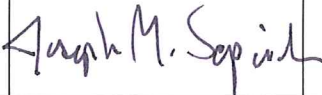


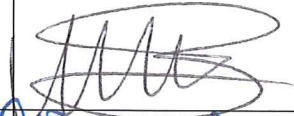
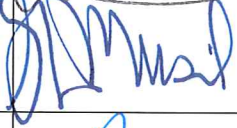

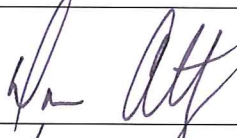
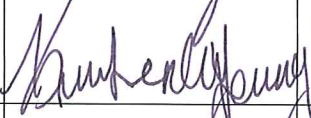
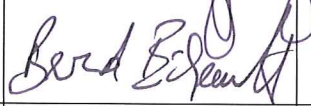


Allen Gross
Chair of Advisory Board, K-State Olathe Innovation Campus (KOIC)
Vice President, EFL Associates, Inc.

Additional Signatures/Affiliations of Members of the KOIC Advisory Board:

	Signature	Name	Industry Affiliation
1.		ROBERT DREBNAL	BANKING
2.		LAURIE MINARD	GARMIN

Proposed Professional Science Master and Graduate Certificate at K-State Olathe

3.		Joseph M. Sopcich	JCCC
4.		WAYNE C. CARTER	KC ALSI
5.		ERNST HEINKE	ARATANA THERAPEUTICS
6.		Michael Boehm	JCERT
7.		Greg Musil	JCERT
8.		JEFF PLACEK	McCOWN GORDON CONSTRUCTION
9.		DAN ABITZ	GEORGE BUTLER ASSOC.
10.		Kimberly Young	KC Animal Health Corridor
		Bernd Eichenmueller	Boehringer Ingelheim Vetmedica

Graduate School
Graduate Certificate in Professional Interdisciplinary Sciences
School of Applied and Interdisciplinary Studies, K-State Olathe
Assessment of Student Learning Plan

A. College, Department, and Date

College: School of Applied and Interdisciplinary Studies
Department: School of Applied and Interdisciplinary Studies
Date: August 24, 2015

B. Contact Person(s) for the Assessment Plan

Dr. Janice M. Barrow,
Associate Dean for Academic Affairs and Executive Education
Associate Professor, School of Applied and Interdisciplinary Studies, KSO
Email: jbarrow@ksu.edu

C. Name of Proposed Degree Program

Graduate Certificate in Professional Interdisciplinary Sciences

D. Assessment of Student Learning Three-Year Plan

Consistent with the Graduate Handbook, Chapter 4: Graduate Certificate Programs, in *“the preferred model, students are enrolled in both a graduate degree program (master’s or doctoral) and a graduate certificate program ... Some certificate programs are linked to specific graduate degree programs, such that they provide an interdisciplinary experience ...”* In this case the graduate certificate is part of a master’s degree program, the Professional Science Master in Applied Science and Technology (PSM). The certificate also provides an interdisciplinary experience with the unique student learning outcomes, as guided.

1. Student Learning Outcome(s)

a. Student learning outcomes for the program.

Upon successful completion of the Graduate Certificate in Professional Interdisciplinary Sciences, the students will be able to:

1. Demonstrate ability to use information, concepts, analytical approaches, and critical thinking skills to transform ideas or solutions into entirely new forms.
2. Demonstrate ability to perform in one or more disciplines outside of their own discipline.

- b. Indicate outcomes on the above list that will be assessed by the first mid-cycle review.**

Each and every student learning outcome is equally important; therefore, all the student learning outcomes will be assessed by the first mid-cycle review.

Please see Appendix A for the Alignment Matrix

2. Assessment Strategies

How will each of the learning outcomes be assessed?

Program graduation requirements are 12 credit hours. After taking a three credit foundation course focused on developing skills in the Interdisciplinary Process the students are expected to have an enhanced ability to address broad and multi-faceted challenges. They are also to take the remaining nine credit hours from at least two different disciplines. Students are more highly motivated when they get to choose topics that are interesting to them. As a result, the learning becomes meaningful, purposeful and deeper, resulting in learning experiences that stay with the student for a lifetime.

a. Direct Measures

Both student learning outcomes will be assessed using components of the Certificate portfolio consisting of artifacts to demonstrate satisfaction of the SLOs from courses completed (assignments contained within the courses). A panel of three faculty members will use a common rubric for assessing each component of the portfolio.

b. Indirect Measures

Completion Assessments

- a. Student Self-Assessment of the Student Learning Objectives
- b. Program Assessment

Post Completion Assessment

Survey of alumni

c. Number of students included in the assessment

All students completing the certificate will be included in the assessment process. Using a scale of 4.0 the acceptable average is 3.0 with 2.0 considered passing. Results will be compiled for the academic year and then reported by the total group and by disaggregated groups, as appropriate. For a relatively small number of students, as determined by the degree committee, only narrative summaries will be reported.

d. **Timetable**

Direct Measures: Data from each of the measures will be compiled at the conclusion of each semester in an aggregate format, by the Program Coordinator.

Indirect Measures: The completion surveys will be sent one month prior to the completion of the program, and compiled in an aggregate format, for all the students in an academic year. The post completion survey will be sent to the graduates/ alumni one year after completion of the program, during the summer.

Data will be reported and reviewed at a regularly scheduled School of Applied and Interdisciplinary Studies faculty meeting. Should numbers of students be sufficient to disaggregate, possible meaningful categories will be considered (e.g. admission criteria, location). School of Applied and Interdisciplinary Studies faculty members will review the results and make recommendations for program revisions.

3. **Results and Review of Student Learning Outcomes and Assessment Strategies**

- a. Describe the process the faculty will follow to review the results of assessment data.

Data will be collected each semester students conclude the certificate program from the completed course portfolio rubrics and the students' self-assessment surveys. Each SLO will be analyzed by score on rubrics. The SLO will be deemed as achieved if the average rate is at least 3.0 in a 4.0 system. A course objective alignment matrix (demonstrating how each course objective is a subset of one of the SLOs) will be prepared by the instructors to ensure that all courses are in alignment with SLOs. Faculty will review this matrix along with course project and student self-assessment ratings to make sure all SLOs are being properly addressed within the curriculum. If the average rating on any SLO is found to be below the set standard of 3.0, then the faculty will analyze the content of courses where the SLO is addressed and implement adjustments to the curriculum.

The assessment plan may be modified at any time by the School of Applied and Interdisciplinary Studies faculty, but a thorough review of the data will coincide with the program review required by the Graduate School as scheduled by the Graduate School.

- b. Describe any other program improvement procedures that will be followed (e.g. formative assessments of delivery method, corporate or employer surveys).

The certificate program will also be assessed using the PSM degree assessment infrastructure and tools. Post completion data will be used for longitudinal comparisons, to highlight current trends, to track career progressions, and to assess whether the goals of the Graduate Certificate in Professional Interdisciplinary Sciences are being achieved, with input from the degree program's External Advisory Board.

The follow-up surveys will be used to assess whether the curriculum is meeting the needs of the workforce. This survey data will be reviewed annually by the School of Applied and Interdisciplinary Studies faculty team. If the program is found to be missing major issues with the professional practice, then instructors will review the program in detail from admission standards through curriculum. The program will be modified as determined necessary by the faculty.

Appendix A

Alignment Matrix for Graduate Program: Graduate Certificate in Professional Interdisciplinary Sciences

SLO/Required Courses/experiences	Direct Assessment	Indirect Assessment	Student Population	Required Interdisciplinary Process: AAI 801	STEM Electives Selected*	Professional Electives Selected*
Degree program SLOs						
1. Demonstrate ability to use information, concepts, analytical approaches, and critical thinking skills to transform ideas or solutions into entirely new forms.	Portfolio	Student Self-Assessment of breath of knowledge 1. Completion survey (one month prior to completion), and 2. Post completion surveys (one year after)	All students in the certificate program	A		
2. Demonstrate ability to perform in one or more disciplines outside of their own discipline.	Portfolio	Student Self-Assessment of breath of knowledge 1. Completion survey (one month prior to completion), and 2. Post completion surveys (one year after)	All students in the certificate program		A	A
University SLOs (Graduate Programs)						
Knowledge				A	A	A
Skills				A		A
Attitudes and Professional Conduct				A		A

- Place an “X” for courses or experiences in which students have the opportunity to learn the outcome (coursework, other program requirements).
- Place an “A” for courses or experiences in which student performance is used for program level assessment of the outcome. (assignments in courses, evaluation of final thesis, report, dissertation)

*STEM and Professional elective course selections are listed on the next page

Graduate Certificate in Professional Interdisciplinary Sciences

Elective Stem and Professional Courses for Alignment Matrix

STEM	
Course Number	Course Title (credits)
ASI 671	Meat Selection and Utilization (2 credits)
ASI 675	Monogastric Nutrition (1 credit)
ASI 678	Equine Nutrition (1 credit)
ASI 776	Meat Industry Technology (3 credits)
DMP 710	Introduction to One Health (2 credits)
DMP 754	Introduction to Epidemiology (3 credits)
DMP 802	Introduction to Environmental Health (3 credits)
DMP 844	Global Health Issues (3 credits)
DMP 870	Pathobiology Seminar MS (1 credit)
DMP 880	Problems in Pathobiology MS (1-3 credits)
DMP 888	Globalization, Cooperation, & the Food Trade (1 credit)
DMP 895	Topics in Pathobiology MS (1-3 credits)
FDSCI 600	Food Microbiology (2 credits)
FDSCI 601	Food Microbiology Lab (2 credits)
FDSCI 630	Food Science Problems (0-6 credits)
FDSCI 690	Principles of HACCP (2 credits)
FDSCI 695	Quality Assurance of Food Products (3 credits)
FDSCI 961	Graduate Problem in Food Science (1-6 credits)
HORT 725	Postharvest Technology and Physiology of Horticultural Crops (3 credits)
HORT 780	Health-Promoting Phytochemicals and Physiology of Fruits and Vegetables (2 credits)
HORT 790	Sustainable Agriculture (2 credits)
HORT 791	Urban Agriculture (2 credits)
HORT 793	Farm to Fork Food Safety (2 credits)
HORT 794	Urban Food Systems (2 credits)
HORT 795	Urban Agriculture Study Tour (1 credit)
HN 841	Consumer Research - Fundamentals (1 credit)
HN 843	Consumer Research - Qualitative (1 credit)
HN 848	Consumer Research - Quantitative (1 credit)
STAT 701	Fundamental Methods of Biostatistics (3 credits)
STAT 703	Introduction to Statistical Methods for the Sciences (3 credits)
STAT 705	Regression and Analysis of Variance (3 credits)
Professional	
Course Number	Course Title (credits)
AAI 801	Interdisciplinary Process (3 credits)
AAI 840	Reg. Aspects of Drug and Vacc Dev. in Animal Health (2 credits)
AAI 858	Capstone Experience I (1 credits)
AAI 859	Capstone Experience II (2 credits)
COT 703	Project Management for Professionals (3 credits)
COT 704	Managerial Finances, Metrics, and Analytics (3 credits)
COT 706	Informatics and Technology Management (3 credits)
DMP 815	Multidisciplinary Thought and Presentation
DMP 816	Trade & Agricultural Health (2 credits)
DMP 888	Globalization, Cooperation, and Food Trade (1 credit)
EDACE 832	Interpersonal and Intrapersonal Communications (3 credits)
EDACE 834	Leading Adults in a Globalized and Diverse World (3 credits)
EDACE 835	Developing Teams & Leaders (3 credits)
EDACE 836	Group Dynamics (3 credits)
EDACE 886	Seminars in Adult Education (1-6 credits)
Students may also choose from the following K-State Olathe based courses	
AAI 795	Topics in Applied and Interdisciplinary Studies (1-3 credits)
AAI 870	Seminar in Applied and Interdisciplinary Studies (1-6 credits)
AAI 880	Problems in Applied and Interdisciplinary Studies (1-6 credits)
AAI 895	Advanced Topics in Applied and Interdisciplinary Studies (1-6 credits)
AAI 899	Research in Applied and Interdisciplinary Studies (1-6 credits)

Appendix B: Rubrics and Surveys

Graduate Certificate in Professional Interdisciplinary Sciences

Assessment of: (SLO1) Demonstrate ability to use information, concepts, analytical approaches, and critical thinking skills to transform ideas or solutions into entirely new forms.

Common Rubric used to assess model development in the AAI 801 Interdisciplinary Process Course

	Capstone 4	Milestones		Benchmark** 1
		3	2	
Influence of context and assumptions (SLO1)	Thoroughly (systematically and methodically) analyzes the assumptions on at least two assumptions and carefully evaluates the relevance of contexts when presenting a position.	Identifies assumptions on at least two assumptions and several relevant contexts when presenting a position.	Questions some assumptions. Identifies several relevant contexts when presenting a position. May be more aware of assumptions from at least two disciplines.	Shows an emerging awareness of present assumptions (sometimes labels assertions as assumptions). Begins to identify some contexts when presenting a position.
Taking Risks (SLO 1)	Actively seeks out and follows through on untested and potentially risky directions or approaches to the assignment in the final product.	Incorporates new directions or approaches to the assignment in the final product.	Considers new directions or approaches without going beyond the guidelines of the assignment.	Stays strictly within the guidelines of the assignment.
Innovative Thinking (SLO 1)	Extends a novel or unique idea, question, format, or product to create new knowledge or knowledge that crosses boundaries.	Creates a novel or unique idea, question, format, or product.	Experiments with creating a novel or unique idea, question, format, or product.	Reformulates a collection of available ideas.
Connecting, Synthesizing, Transforming (SLO 1)	Transforms ideas or solutions into entirely new forms.	Synthesizes ideas or solutions into a coherent whole.	Connects ideas or solutions in novel ways.	Recognizes existing connections among ideas or solutions.

**No points for performance below benchmark level.

Graduate Certificate in Professional Interdisciplinary Sciences

Assessment of: (SLO2) Demonstrate ability to perform in one or more disciplines outside of their own.

Common Rubric used to assess competency in two or more separate disciplines, from the approved program of study, to the satisfaction of those particular departmental requirement.*

	Capstone 4	Milestones		Benchmark** 1
		3	2	
Discipline 1	Very strong	Strong	Weak	Very Weak
Discipline 2	Very strong	Strong	Weak	Very Weak
Discipline 3 Optional	Very strong	Strong	Weak	Very Weak
Average				

**No points for performance below benchmark level.

Graduate Certificate in Professional Interdisciplinary Sciences

Student SLO Self-Assessment

Please rate your learning related to the four Student Learning Outcomes and provide comments below.

Student Learning Outcomes (SLO)	Ratings Low High			
1. Demonstrate ability to use information, concepts, analytical approaches, and critical thinking skills to transform ideas or solutions into entirely new forms.	1	2	3	4
Why do you rate yourself at this level?				
2. Demonstrate ability to perform in one or more disciplines outside of their own discipline.	1	2	3	4
Why do you rate yourself at this level?				
Describe how you may approach work demands differently, as a result of this program				

Graduate Certificate in Professional Interdisciplinary Sciences

Program Completion Questions

1. Please rate the following dimensions on a scale of Excellent to Poor
 - The intellectual quality of the faculty
 - The intellectual quality of my fellow graduate/professional students
 - The relationship between faculty and graduate/professional students
 - Program's ability to integrate recent developments in my field
 - Program space and facilities
 - Overall quality of graduate level teaching by faculty
 - Amount of financial support
 - Quality of academic advising and guidance
 - Helpfulness of staff members in my department or program
 - Assistance in finding employment
 - The opportunity to interact across disciplines
 - Academic standards in my program
 - Overall program quality

2. To what extent do you agree or disagree with each of the following statements?
 - Students in my program are treated with respect by faculty.
 - Faculty members are willing to work with me.
 - Rapport between faculty and students in my program is good.
 - My own relationships and interaction with faculty are good.
 - There are tensions among faculty that affect students.
 - Financial support for students in my program is distributed fairly.
 - Students in my program are collegial.
 - My relationships and interaction with other students in my program are good.
 - Overall, the climate of my program is positive.
 - Program activities foster a sense of intellectual community.
 - Program content supports my research/professional goals.
 - Program structure encourages student collaboration or teamwork.
 - Program structure provides opportunities to take coursework outside my own department.
 - Program structure provides opportunities to engage in interdisciplinary work.
 - Amount of coursework seems appropriate to the degree.

3. Please indicate the importance to you, and the extent to which you feel your abilities in the following areas were enhanced, during your program. *(This would be set up with a slide, so they could respond to which degree they were important (1-10) and then do what degree the abilities were enhanced in the program).*

Problem Solving
Oral Communications Skills

Written Communication Skills
Interdisciplinarity

4. If you could change one thing about your experience as a graduate/professional student at this university to make it more successful or fulfilling. What would it be?
5. Which aspect of your graduate/professional program pleased you the most?
6. Were there aspects of your graduate/professional program that you found problematic?
7. What changes would you recommend for the program in the future?

Graduate Certificate in Professional Interdisciplinary Sciences

Student Outcome/Post Completion Survey

The survey will collect the following core data:

Employment Status
Sector of Employment
Job Title
Primary work activity
Salary range

All things considered, my graduate certificate program met my expectations

1 = Definitely Not 2 = No 3 = Somewhat 4 = Yes 5 = Definitely Yes

DN	N	S	Y	DY
1	2	3	4	5

Regarding the Student Learning Outcomes:

1. How have you used information, concepts, analytical approaches, and critical thinking skills to transform ideas or solutions into entirely new forms?
2. Have you used information, concepts, analytical approaches, and/or critical thinking skills from a discipline outside of your own discipline?

Signature Sheet to add New Program
Graduate Certificate in Professional Interdisciplinary Sciences

Department: School of Applied and Interdisciplinary Studies

This signature sheet below is to be completed and submitted to Faculty Senate Academic Affairs Committee when proposing to add or discontinue an academic sub plan, plan, or program. Approval should be obtained in the sequence listed below:

Name(s) of Academic Sub plan(s), Plan(s,) or Program(s):

Graduate Certificate in Professional Interdisciplinary Sciences

Signatures

Approval Date

Designated Representative, Department Faculty

Department Head

Chair, College Course & Curriculum Committee

College Dean

4/20/2015

Only if graduate curriculum

Chair, Graduate Council Subcommittee

Dean, Graduate School

Chair, Faculty Senate Academic Affairs

President, Faculty Senate

Provost/Vice President Academic Affairs